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EXAMINER

SCHWARTZ, JORDAN MARC

ART UNIT PAPER NUMBER

2873

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/729,200

**Applicant(s)**

MILLER ET AL.

**Examiner**

Jordan M. Schwartz

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.  
4a) Of the above claim(s) 27-39 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,5-8,10-21 and 23-26 is/are rejected.  
7) ☒ Claim(s) 3,4,9 and 22 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/6/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Election/Restriction***

Applicant's election without traverse of Group I, claims 1-26 in the Election received October 26, 2004 is acknowledged.

***Claim Rejections - 35 USC § 112***

Claims 11-12 and 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 11-12, the term "the aperture" lacks an antecedent basis and it is not clear if applicant meant to claim within claims 11-12, "The ophthalmic device of claim 1, the device further comprising an aperture, wherein the aperture..." or applicant meant to claim "The ophthalmic device of claim 1, the optic further comprising an aperture, wherein the aperture...", or if these claims were intended to each depend from claim 5 (which is the assumed meaning for purposes of examination) which requires an aperture and the aperture substantially in the center of the optic, or if some other meaning was intended and the lack of clarity renders these claims vague and indefinite.

With respect to claims 24-25, the term "the aperture" lacks an antecedent basis and it is not clear if the intended meaning is "The method of claim 19, the ophthalmic device further comprising an aperture, wherein the aperture..." (which is the assumed meaning for purposes of examination) or if the intended meaning is "The method of claim 19, the optic further comprising an aperture, wherein the aperture..." , or if the intended meaning is "The method of claim 19, the

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ophthalmic device further comprising an aperture substantially in the center of the lens, wherein the aperture..." (similar to what is claimed in claim 5) or if some other meaning is intended and the lack of clarity renders the claims vague and indefinite. The dependency of these claims is apparently not incorrect since none of the other claims depending from claim 19 are claiming an aperture.

### ***Claim Objections***

Claim 19 (and respective dependent claims 20-26) is objected to for the following reason. Since the intended meaning could be determined from the specification and the Figures, a 112 rejection was not made but instead this lack of clarity issue is being raised in the following claim objection.

With respect to claim 19, "inserting the ophthalmic device" lacks an antecedent basis creating a lack of clarity. From what is set forth in the specification and Figures the assumed meaning of claim 19, line 3 is "providing an ophthalmic device comprising an optic comprising a first zone and a second zone,..." and the additional clarity is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under

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the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 7-8, 10-21, 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Atebara et al patent number 4,955,904.

Atebara et al reads on these claims by disclosing the limitations therein including the following: an ophthalmic device for insertion into a cornea of an eye (abstract). The eye for which the device of Atebara et al is being used will inherently have a retina including retinal rods and retinal cones this being based upon Atebara et al disclosing the device for use with a human eye (abstract). Atebara et al further discloses an optic (abstract, Figures 1 or 6, the aperture or transparent portion and mask together as the "optic"); the optic comprising a first zone being substantially completely transmissive (abstract, Figure 1, "12", Figure 6, "15", i.e. the transparent or aperture portion as the "first zone"); a second zone (abstract, Figures 1 or 6, "11" i.e. "the mask" as the "second zone"). Atebara et al further discloses the mask "configured to filter light" in that it is providing "filtering" since it is configured to block additional light in bright light conditions (column 4, line 36) while it is configured to allow more light to pass around it in dim light conditions (abstract). Atebara et al further discloses the mask configured to favor transmission of light to which the retinal rods are generally more sensitive by disclosing the mask configured to favor more light to pass around it in low light conditions i.e. it is configured to favor low light conditions (abstract). Atebara et al further discloses depth of focus being increased for relatively near objects (column 3, line 10 i.e. increased depth of focus for "close distance") and

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discloses contrast being increased for relatively near objects (column 3, line 10, column 4, line 54). Atebara et al further discloses an aperture substantially in the center of the optic (abstract, Figure 6); the optic comprising a pattern of curvatures (Figure 1, the curvatures at the bottom of mask "11"); the optic configured as a series of concentric circles (Figure 6 i.e. "15" and "11" as concentric circles). Any material, including the optic, will inherently comprise particles and therefore will inherently be "configured as a set of particles".

Atebara et al further discloses the aperture including an optical power (column 4, line 47); the aperture with a diameter within the range of claim 12 (column 4, line 48, figure 15A); the optic having an outer diameter within the range of claim 13 (Figure 15A); the optic configured to block light to which the retinal cones are more sensitive i.e. to block the transmission of bright light (column 4, line 36 i.e. the mask configured to block more light in bright light conditions); and the optic configured to favor transmission of dim or blue light (abstract, re the optic configured to allow more light to pass around the mask in dim light conditions i.e. configured to favor transmission of dim light).

Claims 1-2, 5-8, 10-21, 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Xu et al patent number 5,980,040.

Xu et al reads on these claims by disclosing the limitations therein including the following: an ophthalmic device for insertion into a cornea of an eye (column 3, lines 38-44). The eye for which the device of Xu et al is being used will inherently have a retina including retinal rods and retinal cones this being based upon Xu et al disclosing the device for use with a human eye (column 1,

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line 5 to column 2, line 44, column 3, lines 38-44). Xu et al further discloses an optic (column 4, lines 9-21 i.e. the center aperture and the surrounding region or regions as the "optic"); the optic comprising a first zone being substantially completely transmissive (Figure 1, "20" column 4, lines 9-21 re the center aperture as the "first zone"); a second zone (column 4, lines 9-44 re the region or regions surrounding the center aperture as the "second zone"). Xu et al further discloses the second zone "configured to filter light" (column 3, line 15 re configured to absorb or reflect light and column 4, line 31 re configured "for allowing at least some light to pass therethrough"); and configured to favor transmission of light to which the retinal rods are generally more sensitive (column 2, line 35, column 3, line 2, column 3, line 18 i.e. the surrounding region is configured to favor low light conditions). Xu et al further discloses depth of focus and contrast both being increased (column 3, line 38). It is believed that Xu et al is increasing depth of focus and contrast for all ranges and therefore inherently including for "near objects" this being reasonably based upon what is disclosed in the reference. Xu et al further discloses the second zone filtering light by reflecting a portion of the light (column 3, line 15); an aperture substantially in the center of the optic (Figure 1, "20", column 4, lines 10-21); the optic comprising a light reflective material (column 3, line 15). The optic of Xu et al is located on a curved surface of an intraocular lens (Figure 1A, column 3, line 41) and therefore will inherently include a pattern of curvatures. Xu et al further discloses the optic configured as a series of concentric circles (Figure 1, i.e. "20" and "18"). Any material, including the optic, will inherently comprise particles and

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therefore will inherently be "configured as a set of particles". Xu et al further discloses the aperture including an optical power (column 2, line 55); the aperture with a diameter within the range of claim 12 (column 4, lines 53-60, column 5, line 8); the optic having an outer diameter within the range of claim 13 (column 5, line 12); the optic configured to block bright light i.e light to which retinal cones are more sensitive (column 4, line 56); and the optic configured to favor transmission of dim or blue light (column 2, line 35, column 3, line 2, column 3, line 18 i.e. the surrounding region is configured to favor low light conditions).

***Allowable Subject Matter***

Claims 3-4, 9 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: with respect to the allowable subject matter, none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, with reference to claims 3-4, none of the prior art either alone or in combination, disclose or teach of the claimed ophthalmic device specifically including, as the distinguishing feature in combination with the other limitations, the claimed second zone having a transmission peak at about 500 or 550 nm. Specifically, with reference to claims 9 and 22, none of the prior art either alone or in combination, disclose or teach of the claimed ophthalmic device or method for



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increasing the depth of focus of a human eye specifically including, as the distinguishing feature in combination with the other limitations, the claimed ophthalmic device comprising an optic wherein the optic is configured as a weave.

***Examiner's Comments***

Portney patent number 5,702,440 and Abraham patent number 5,774,202 are being cited to show ophthalmic devices and methods having some similar structure or method steps to that of the claimed invention.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (571) 272-2337. The examiner can normally be reached on Monday to Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jordan M. Schwartz  
Primary Examiner  
Art Unit 2873  
January 5, 2005